

THE CAPE SPECIES OF *TRIGLOCHIN*.

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There exists some degree of uncertainty in the determinations of the material of *Triglochin* from South Africa. Four distinct species are found but these have been placed in herbaria under a variety of names. Of these species *T. striatum*, Ruiz. and Pav., which has short fruits, is very distinct and presents no difficulties. It is among the long fruited forms that confusion has occurred. Two species, *T. bulbosum* L., and *T. laxiflorum*, Guss. were described by A. Bennett in *Flora Capensis* (VII. 42. 1897); a third, *T. elongatum*, was described later by Fr. Buchenau (*Das Pflanzenr.* IV. 14.10. fig. 3. 1903) from specimens collected at Malmesbury and in Pondoland.

T. elongatum, Buch. is distinguished by the possession of a creeping underground stem but no tubers. Material collected at Muizenberg that agreed with the description of this species was sent to Berlin for comparison with the type specimens (Bachmann, 1693) and Professor Markgraf reports that there is complete agreement.

T. elongatum has a thin underground stem, 15—20 cm. or more below the surface. This bears erect aerial stems up to 40 cm. in height which are slightly thickened in the lower portions, the diameter being 4—5 mm. instead of 2 mm. These thicker lower parts are surrounded by leaf sheaths that break down into soft pale coloured fibres. The leaves are erect. The spike is long and crowded, with the fruits more or less secund. The fruits are erect, longer than their peduncles, slightly emarginate at the base, and a little narrowed at the top. The stigmas are small with short hairs on the upper surface.

Most of the material referable to this species that exists in herbaria has the erect stem only and is without the thin rhizome. The species appears to be not uncommon in marshy places at low altitudes and especially near the sea. It appears to favour brackish soils and has not been found inland. It flowers in October and November. The following belong to this species :—

Cape Peninsula : Lakeside and Muizenberg, Adamson 790, 1365, 1370, 1372-3, 1614, L. Bolus, M. R. Michell, Schlechter (Bolus Herb. 7148) ; Wolley-Dod 3658 ; Paarden Is, Adamson 843, Dümmer 1282 ; Cape Flats, Rehmann 1282.

Uitenhage : Ecklon and Zeyher 620 ; Cape Receif, Ecklon and Zeyher. Kentani, Pegler 335 ; Durban, Wood 396, 425. Without locality, Zeyher (as *T. maritimum*).

Of the tuberous forms, *T. laxiflorum* Guss. is a critical species which some authors have regarded as a state of *T. bulbosum* (cf. Buchenau l.c.). Careful examination of material from southern Europe and northern Africa shows that the plant generally separated under this name is small, with a bulb-like tuber surrounded by rather soft fibres, a lax spike with ascending fruits on short stalks, the fruits being widest at the base. No plants from South Africa have been seen which really agree with these and it seems that *T. laxiflorum* must be omitted from our flora.

The South African material grouped under *T. bulbosum* undoubtedly includes two distinct species. Very much the commoner is a plant of marshy places with a swollen tuber which is wider than long and blunt-ended. The tuber is surrounded by dark coloured, hard, rather woody fibres. The spike is rather lax with spreading fruits, which are slightly narrowed at the base, distinctly so at the top. The stigmas are large and covered by longish hairs. This is *T. bulbosum* L. (*T. Barrelieri* Lois.), a plant with a wide distribution. It has been found in several inland stations in South Africa though commoner near the coast. *T. bulbosum* shows a great range of variation in size.

The second plant which has often been united with this is a much more slender one found growing in shelter on mountain slopes but not in marshes. This is distinguished by the pale green colour, small fusiform tubers which often occur in groups and are surrounded by a brown fibrous sheath, the very slender spreading flexible leaves, few-flowered spikes, and fruits narrowed at both ends on long stalks. The stigmas are smaller than those of *T. bulbosum* and with much shorter hairs but are larger than those of *T. elongatum*. This is an undescribed species :—

T. tenuifolium, Adamson sp. nov. Herba scaposa, debilis, tuberosa, tuberis pluribus fusiformibus, 1·5—2 cm. longis, 1 cm. latis, vaginis fuscis fibrosis obtectis. Folia laevia, tenuissima; elongata, subflaccida. Inflorescentia suberecta, laxa, pauciflora, foliis brevior, pedicellis divaricatis fructum aequantibus vel paullo superantibus. Fructus apice basique cuneatus, stigmatibus divaricatis pilis brevibus tectis.

Sheltered places among bushes on mountain slopes up to 1,200 ft., mostly on granite soils. Fl. Oct.—Nov. Cape Peninsula and surrounding districts. Does not inhabit marshes.

Cape Peninsula :—Table Mt. west side, Adamson 986 (type in Bolus Herb.)

M. R. Michell ; Stinkwater, Rehmann 1194 ; Kloof Nek, L. J. Scott ; Sea Point, Wilms 3644, 3645 ; Lion's Head, Wolley-Dod 2915 ; Cape Town, Schlechter 1540 ; Klaasenbosch, Wolley-Dod

2918 ; Muizenberg, Dümmer 1050 ; Simonstown, Baviaans Kloof, Salter 344 /10.

Caledon, Purcell 128.

Leaves 14—15 cm. long very slender 1 mm. wide. Spikes up to 14 cm. Pedicels 8—12 mm., fruits 7—8 mm. Whole plant yellowish green.

Buchenau (1 c.) places the South African plant of *T. striatum* under var. *montevidense*, Buch. which is characterised by the relatively large size, broad leaves, and long ligules. The variety is not a very distinct one and does not appear worthy of maintaining.